

Further, please replace the paragraph beginning at page 7, line 1, with the following paragraph:

A²

--The term "target gene" (alternatively referred to as "target gene sequence" or "target DNA sequence" or "target sequence") refers to any nucleic acid molecule or polynucleotide of any gene to be modified by homologous recombination. The target sequence includes an intact gene, an exon or intron, a regulatory sequence or any region between genes. The target gene comprises a portion of a particular gene or genetic locus in the individual's genomic DNA. As provided herein, the target gene of the present invention is a serine protease gene. A "serine protease gene" refers to a sequence comprising SEQ ID NO:1 or comprising the sequence encoding the serine protease gene identified in GenBank as Accession No. AF042822; GI:7330637. In one aspect, the coding sequence of the "serine protease gene" comprises SEQ ID NO:1 or comprises the gene identified in GenBank as Accession No. AF042822; GI:7330637.

In the Claims:

Please cancel claims 1-16.

Please add new claims 17-20 as follows:

- FP3
17. (New) A transgenic mouse whose genome comprises a heterozygous disruption in an endogenous serine protease gene, wherein the transgenic mouse, upon breeding with another transgenic mouse whose genome comprises a heterozygous disruption in an endogenous serine protease gene, produces a transgenic mouse having a homozygous disruption in an endogenous serine protease gene and exhibiting a developmental abnormality during embryonic development.
 18. (New) The transgenic mouse of claim 17 wherein the developmental abnormality results in embryo death at between about 12.5 days and 14.5 days in the uterus, wherein the embryo comprises within its genome, a homozygous disruption of the endogenous serine protease gene.
 19. (New) A cell or tissue derived from the transgenic mouse of claim 17, wherein the cell or tissue comprise the disruption in the endogenous serine protease gene.
 20. (New) A method of producing a transgenic mouse comprising a heterozygous disruption in an endogenous serine protease gene, the method comprising: